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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Rec'd PCT/PTO 24 JUN 2005

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Applicant's or agent's file reference 12873/04535	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 03/07414	International filing date (day/month/year) 11.03.2003	Priority date (day/month/year) 13.03.2002
International Patent Classification (IPC) or both national classification and IPC A61H1/00, A61G5/00		
Applicant INVACARE CORPORATION et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of sheets.

3. This report contains Indications relating to the following items:
- I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 13.10.2003	Date of completion of this report 12.07.2004 16.06.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Fischer, E Telephone No. +49 89 2399-7290 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/US 03/07414**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-14 as originally filed

Claims, Numbers

1-6 as originally filed

Drawings, Sheets

1/8-8/8 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
 - ☐ the language of publication of the international application (under Rule 48.3(b)).
 - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority in written form.
 - ☐ furnished subsequently to this Authority in computer readable form.
 - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US 03/07414

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2,3,5
	No: Claims	1,6
Inventive step (IS)	Yes: Claims	2,3,5
	No: Claims	1,4,6
Industrial applicability (IA)	Yes: Claims	1-6
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

I. Documents

Reference is made to the following documents:

D1: US-A-4 500 102;

D2: US-B1-6 311 999;

D3: US-A-4 592 570.

II. Requirements of Article 33(2), (3) PCT - Novelty / Inventive step

1. Document D1 discloses (see especially Figs. 11, 11A, 12; column 5, line 61 - column 6, line 17) (the references in parentheses applying to this document):

A wheelchair including:

a seat back (150);

a frame rail (12, 14);

a seat back fold-down mechanism supporting said seat back for folding movement relative to said frame rail between a folded position and an unfolded and locked position, said seat back fold-down mechanism including a first releasable locking mechanism (164) for releasably locking said seat back in the unfolded and locked position; and

a seat back angle adjustment mechanism for adjusting the angle of said seat back relative to said frame rail when said seat back is in the unfolded and locked position (see Fig. 11), said seat back angle adjustment mechanism including a second releasable locking mechanism (158) for releasably locking said seat back at any selected one of a plurality of different angles relative to said frame rail (column 6, lines 4-9);

said seat back fold-down mechanism enabling folding movement of said seat back between the folded position and the unfolded and locked position without releasing said second releasable locking mechanism when said seat back is locked in any selected one of the plurality of different angles relative to said frame rail (see Fig. 11);

said seat back having a portion (lower end of the back cane) that slides along said frame rail (namely along upper end of frame rail portion (14); see Figs. 11A, 12) as the seat back angle is adjusted.

Since the subject-matter of independent **claim 1** does not differ therefrom, it is not novel (Article 33(2) PCT).

2. The subject-matter of **claim 1** likewise lacks novelty over the disclosure of each of the documents D2-D3, each of the documents disclosing a wheelchair of the type defined in claim 1 including inter alia a seat-back fold-down mechanism and a seat back angle adjustment mechanism, the seat back fold-down mechanism enabling folding movement without releasing a locking mechanism of the seat back angle adjustment mechanism (D2: see especially Fig. 13; column 9, line 66 - column 10, line 39; D3: see especially Figs. 2, 3, 6, 7, 21; column 7, line 9 - column 8, line 20), whereby the seat back has a portion (D2: portion (81) fixed to the seat back; D3: lower end of the back cane (45)) that slides along said frame rail (D2: frame rail (56); D3: part (68) being part of frame rail (38), see column 7, lines 14-16) as the seat back angle is adjusted.

3. The subject-matter of independent **claim 6** corresponds to the subject-matter of independent claim 1 with the features:

- a) "said seat back having a portion that slides along said frame rail as the seat back angle is adjusted"

being replaced by the features:

- b) "said seat back including a back cane that is pivotally connected with said frame rail by a pivot bracket, said back cane being fixedly connected to said pivot bracket, said pivot bracket pivoting relative to said frame rail when said seat back is moved from the unfolded position to the folded position"

Since all features b) likewise are known from D1 (see Fig. 11: pivot bracket (152)) or D2 (see Fig. 13: pivot bracket (81)), the subject-matter of independent **claim 6** is anticipated by the disclosure of each of the documents D1, D2, as well.

4. The use of standard plunger pin assemblies for both releasable locking mechanisms as defined in dependent **claim 4** is merely directed to the selection of one of several straightforward possibilities, which selection is done by the skilled person in accordance with circumstances, without the exercise of inventive skill. Therefore, the subject-matter of claim 4 does not involve an inventive step within the meaning of Article 33(3) PCT.

5. Document D1, which is considered to represent the most relevant state of the art, discloses (cf. above) a wheelchair from which the subject-matter of dependent **claim 2** appended to claim 1, as well as of independent **claim 5** differs in that the seat back has a length that varies as the seat back angle is adjusted, whereby seat back angle adjustment means are provided working in a completely different way compared to those of D1. There is no indication in the available prior art documents that would lead the skilled person to combine the adjustment of the seat back angle of the wheelchair as known e.g. from D1 with a variation of the length of the seat back. Thus, the subject-matter of claims 2 and 5 is considered not only as being novel (Article 33(2) PCT), but also as involving an inventive step (Article 33(3) PCT).

Claim 3 is dependent on claim 2 and as such also meets the requirements of the PCT with respect to novelty and inventive step.